

ANNUAL CERTIFICATE OF INSPECTION ACTIVITIES

FOR ESTABLISHMENTS (INCLUDING
NIGHTCLUBS) LICENSED BY THE ABCC
TO SELL ALCOHOLIC BEVERAGES TO BE
CONSUMED ON THE PREMISES

**WE OFTEN SEEK TO USE THE
BUILDING CODE AS A SCALPEL
BUT IT IS WRITTEN MORE LIKE
A 2 ½ POUND SLEDGEHAMMER**

WHAT IS A NIGHTCLUB?

303.1.1 Definitions.

NIGHT CLUB. An occupancy generally characterized by a combination of any of the following: no theatrical stage accessories other than raised platform; low lighting levels; entertainment by a live band or recorded music generating above-normal sound levels; later-than average operating hours; tables and seating arranged or positioned so as to create ill defined aisles; a specific area designated for dancing; service facilities for alcoholic beverages with limited food service; and high occupant load density.

BACKGROUND HISTORY

■ Many of the most horrific multiple fire death events in recorded history, in part, involved blocked, locked, non functioning or missing required means of egress elements and/or dead-end corridors and/or improper interior finishes or improper hanging decorations and/or overcrowding and ensuing panic/ Included in this dark list are:

1903 Iroquois Theater Fire, Chicago (600 deaths)

- An arc lamp ignited a muslin curtain –fire then spread thousands of square feet of highly flammable painted canvas scenery flats.
- fire exits hidden behind draperies,
- unfamiliar bascule lock on certain egress doors.
- trapped in dead ends or while attempting to open windows that were designed to look like doors.
- a stage door, opened inwards and became jammed as actors pressed toward the door.
- iron grates that barred the stairways were still in place.
- hundreds of people were trampled, crushed, or asphyxiated.
- unfinished fire escapes.
- Many jumped or fell from the icy, narrow fire escapes; the bodies of the first jumpers broke the falls of those who followed them.

BACKGROUND HISTORY– contd.

1908 Rhodes Opera House, Boyertown, PA (171 deaths)

- A kerosene lamp was knocked over, lighting gasoline from a stereoscopic machine.
 - The stage and auditorium were located on the 2nd floor and all auxiliary exits were either unmarked or locked.
 - One fire escape was available but unable to be accessed through a locked window above a 3 foot sill.
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1908 Collinwood School in what is now a part of Cleveland, OH (175 deaths)

- The school was built with load-bearing masonry outer walls, with wooden joists.
- A joist caught fire when it was overheated by a steam pipe.
- The building's main staircase extended from the front doors of the building, up to the third floor; without benefit of fire doors. The stairwell acted like a chimney, helping to spread the fire quickly.
- Oiled wooden hall and classroom floors also fueled the fire.
- Doors to the building were equipped with common door knob latches, not the more modern crash bar type latch.
- As panic leading to the crush of a large number of students in stairwell vestibules contributed to the death toll
- students also died as a result of smoke inhalation and the fire itself.
- Some children died jumping from second- and third-story windows.

BACKGROUND HISTORY– contd.

1911 Triangle Shirtwaist Factory, NYC (146 deaths)

- Occupied the 8th, 9th & 10th floors / a fire flared up on 8th floor.
- No audible alarm and no way to contact staff on the ninth floor or 10th floor.
- The door to a key stairway was locked to prevent theft by the workers & the foreman who held the stairway door key had already escaped by another route.
- Within three minutes, stairways became untenable.
- Terrified employees crowded onto the single exterior fire escape, - it soon twisted and collapsed from the heat and overload, spilling about 20 victims nearly 100 feet (30 m) to their deaths
- The Elevator Operator saved many lives by traveling three times up to the ninth floor for passengers, but was eventually forced to give up when the rails of his elevator buckled under the heat. / Some victims pried the elevator doors open and jumped into the empty shaft, trying to slide down the cables or to land on top of the car.
- Many of the workers who could not escape the burning building jumped from the eighth, ninth, and tenth floors to the streets below.

BACKGROUND HISTORY– contd.

1942 , Coconut Grove Nightclub, Boston, MA (492 deaths)

- Fire breaks out in late evening in a basement lounge / appears to start in flammable ceiling decorations.
- It is estimated that on that Saturday more than a thousand people were crammed into a space rated for a maximum of 460 people.
- many patrons attempted to exit through the main entrance, but the building's main entrance was a single revolving door and bodies piled up behind both sides of the revolving door, jamming it / Later, it would become illegal to have only one revolving door as a main entrance without being flanked by outward opening doors with panic bar openers attached.
- side doors had been bolted shut to prevent people from leaving without paying. A plate glass window, which could have been smashed for escape, was boarded up and unusable as an emergency exit. Other unlocked doors, like the ones in the Broadway Lounge, opened inwards.

1977, Beverly Hills Supper Club, Southgate, KY (165 deaths)

- Third deadliest Nightclub fire in US
- Fire started undetected in a wedding reception area and became uncontrollable.
- Overcrowding. The Cabaret Room (the largest facility in the club) normally held between 614 and 756 people, but actual occupancy was estimated to be well over 925.
- Inadequate fire exits. Full occupancy of the entire complex was estimated to be roughly 2,750, which under Kentucky law would require 27.5 exits. The club only had 16.5 exits, many of which were not clearly marked or easily reached. Some exits could only be reached by passing through three or more interior doors and corridors. Many victims perished in dead ends and after becoming lost.

BACKGROUND HISTORY– contd.

2003, The Station Nightclub Fire, W Warwick, RI (100 deaths)

- The 4th deadliest nightclub fire in US History.
- Pyrotechnics ignited flammable sound insulation (interior finish).
- Although there were four possible exits, most people headed for the front door through which they had entered.
- The ensuing stampede led to a crush in the narrow hallway leading to that exit, quickly blocking the exit completely and resulting in numerous deaths and injuries among the patrons and staff.
- Of the 462 in attendance, 100 lost their lives, and about half were injured, either from burns, smoke inhalation, or trampling.

■

CERTAIN LAWS THAT GOVERN IN THIS ARENA

- *MGL c.10, § 74 (* means created by C.304/2004)
- *MGL c.148, § 26A ½
- *MGL c.148, § 26G ½
- *MGL c.143, § 97A
- *MGL c. 148, § 34A
- *MGL c. 148, § 34B
- *MGL c. 148, § 34C
- *MGL c. 148, § 34D

MA BUILDING CODE (780 CMR)

IMPACTS wrt the PREVIOUSLY-CITED GENERAL LAWS

- **“10, 74”** requires an annual Certificate of Inspection, issued by a Building Inspector and signed by the Head of the Fire Department for properties licensed by the ABCC to sell alcoholic beverages to be consumed on premises. {What kind of properties? – not just nightclubs, but all properties “ABCC-licensed”}
- **“10, 74”** requires such an annual C/I as a precondition for issuance or renewal of such ABCC License. {Thus it is critical that such C/Is be performed prior to calendar year end as the ABCC renews licenses annually}
- **“10, 74”** establishes the Building Code Appeals process for ABCC-licensed parties denied their annual C/I.

MA BUILDING CODE (780 CMR)

IMPACTS wrt the PREVIOUSLY-CITED GENERAL LAWS - continued

- **“143, 97A”** requires 780 CMR dictate fire sprinklers in new construction or substantially altered nightclub, dance hall, discotheque, bar or similar w/ a capacity of 100 or more and which includes 1 or more residential dwellings, including any common areas connected thereto commencing 12/1/2004.
- **“143, 97A”** also allows the BBRS to promulgate more stringent fire sprinkler requirements. {For A-2 USE nightclubs, 780 CMR does requires fire sprinklering at 50 or more occupants/new construction}
- **“143, 97A”** clarifies that it is the 780 CMR Appeals process for addressing fire sprinklering issues associated w / new construction /substantially altered nightclubs.

MA BUILDING CODE (780 CMR)

IMPACTS wrt the PREVIOUSLY-CITED GENERAL LAWS - continued

- “148, 26G 1/2 ” is, in part, a Fire Service (not Building Official) retrofit fire sprinkler law for existing nightclubs and similar and where the capacity of the existing nightclub is 100 or greater (came into effect in 2004).
- “148, 26G 1/2 ” also mandates Building Officials to order fire sprinklers into existing nightclub-like buildings of < 100 occupants (occupancy established/approved by the Building Official) when posted occupancy is exceeded 2 or more times in a 12 month period OR when posted occupancy is exceeded once by > 1/2. Fines and loss of license to operate in the Commonwealth also occur under certain conditions.

MA BUILDING CODE (780 CMR)

IMPACTS wrt the PREVIOUSLY-CITED GENERAL LAWS - continued

- “148, 26G ½ ”, for houses of worship also statutorily allows temporary “nightclub-like” use of houses of worship, restaurants, lecture halls, auditoriums, state or local government buildings, educational function facilities, or similar places of assembly.
- “148, 34A” sets civil and /or criminal disposition criteria if someone causes or permits a dangerous condition to exist in an Assembly Building / “*dangerous conditions*” include: Blocked/impeded egress; Failure to maintain or shutting off fire protection and/or fire warning systems; storage, in excess of allowed limits of flammables or explosives w/o permit; use of fireworks/pyrotechnics w/o permit; exceeding the occupancy limit.

MA BUILDING CODE (780 CMR) IMPACTS wrt the PREVIOUSLY-CITED GENERAL LAWS - continued

■ “148, 34B”, sets fines and/or imprisonment for persons who wantonly/recklessly violate 780 CMR or 527 CMR and cause serious bodily injury or death / “*serious bodily injury*” means permanent disfigurement; loss/impairment of a bodily function, limb or organ or a substantial risk of death.

■ “148, 34C” sets civil and /or criminal disposition criteria if there is a 2cd or subsequent violation of 780 CMR or 527 CMR, including any incorporated specialized codes, or any lawful order of the State Fire Marshal or State or Local Building Inspector.

■ “148, 34D”: Housing Court or District Court or Superior Court have jurisdiction & equitable powers to enforce lawful orders of the Marshal or Head of a Fire Department.

MA BUILDING CODE (780 CMR) IMPACTS wrt the PREVIOUSLY-CITED GENERAL LAWS - continued

- “148, A”, allows for non criminal disposition via ticketing for both Building Officials and Fire Officials.

STATUS OF 780 CMR TICKETING (non criminal disposition)

AS OF SEPTEMBER 2012

- Blocked or impeded egress.
- Emergency lighting and/or signage.
- Occupant Load exceeded.
- Interior finish.
- Occupant notification devices.
- Fire detection devices.
- Sprinkler system.

MA BUILDING CODE (780 CMR) IMPACTS wrt the PREVIOUSLY-CITED GENERAL LAWS - continued

STATUS OF 780 CMR TICKETING (non criminal disposition)

AS OF SEPTEMBER 2012 – continued

- Occupying a building w/o an appropriately-issued C/O.
- Occupying a building beyond the expiration date of a temporary C/O.
- Proceeding w/construction work w/o proper inspections.
- Beginning work w/o applying for & receiving a building permit.
- Failing to submit amended plans to reflect a change in the scope of work.
- Failing to maintain a property in a manner safe for occupancy.

(780 CMR) ANNUAL CERTIFICATE OF INSPECTION

SUGGESTED ACTIVITIES (open-ended list)

PROBABLE BUILDING INSPECTIONS (List is in somewhat Arbitrary Order)

1. Viable Certificate of Occupancy (C/O) or Certificate of Inspection (C/I) exists for Property.
2. No unpermitted Changes of Use?
3. Properly Posted Occupant Load.
4. Types of interior finishes / is there any foam plastic product & in what quantities, areas, locations?//
What paperwork exists to demonstrate interior finish products are acceptable?
5. All required means of egress elements, including exit access, exits, exit discharge are functioning properly and are not blocked and their sizes are Code-complying/no unsafe lighting or ventilation.
6. Handrails and guards likely Code-complying?
7. Stair rise and run likely Code-complying?
8. Exit signage and exit lighting is Code-complying?
9. House lights turn on & background music silences w/fire alarm signal activation (nightclubs- NC).
10. Door swings appropriate/Presence of a single main front entrance-egress or existing egress analysis (NC)
11. Egress through intervening spaces is Code-complying?
12. 5 year testing certification of exterior stairs and fire escapes
13. AAB Access is Code-complying?
14. Smoke and fire damper presence? and/or HVAC ductwork in egress corridors?
15. Existing fire detection, occupant notification and fire protection systems appear Building & Access Code-complying.
16. Paperwork showing proper testing and frequency of testing exists for all fire protection systems and emergency generator testing has been done by appropriate personnel.
17. Other?

DETAILS

VIABLE C/O or C/I EXISTS FOR PROPERTY

- MA-AMENDED IBC-09 (780 CMR), C1, Section 111, inclusive, “CERTIFICATE OF OCCUPANCY” which in part includes:

111.5.1, “POSTING OF USE AND OCCUPANCY”

111.5.2, “REQUIRED EGRESS POSTING”

111.5.3, “PLACE OF ASSEMBLY POSTING”

111.5.4, “REPLACEMENT OF POSTED SIGNS”

111.5.5, “PERIODIC POSTING INSPECTION”

And/or

- 780 CMR, C1, “PERIODIC INSPECTIONS”, including:

Section 110.7, “PERIODIC INSPECTIONS”;

Table 110, “SCHEDULE FOR PERIODIC INSPECTION OF EXISTING BUILDINGS”;

Section 110.7.1, “ABCC LICENSED ESTABLISHMENTS”.

DETAILS

ANY NON-PERMITTED CHANGE OF USE DISCOVERED?

- 780 CMR, C1, Section 105.1, “REQUIRED” (Building permits), in part reads:
“It shall be unlawful to...change the use or occupancy of a building...”
- 780 CMR, C1, Section 111.1, “USE AND OCCUPANCY”, in part, reads:
“No building...shall be used or occupied and no change in the existing occupancy classification...shall be made, until the building official has issued a C/O...”
- 780 CMR, C1, Section 114.1, “UNLAWFUL ACTS”, in part, reads:
“It shall be unlawful for any person to...occupy or change the use or occupancy of any building...”

DETAILS

INTERIOR FINISHES – ACCEPTABLE OR NOT?

- The ignition of Code non-conforming foam plastics on the interior walls of the Station Nightclub contributed mightily to that resulting tragic multiple fire death event.
- 780 CMR, C26, “PLASTIC”, carefully regulates the use of foam plastics in buildings because some – not all - such products have heat release rates nearly comparable to that of liquid gasoline.
- Additionally, 780 CMR, C8, “INTERIOR FINISHES”, sets requirements for allowed interior finishes in terms of flame spread and smoke developed per ASTM E 84 or UL 723 along w/interior floor finish or floor covering performance per NFPA 253 Classifications and additionally, for floor coverings, compliance to the DOC FF-1 “pill test”.
- 780 CMR, C8, Table 803.9, “INTERIOR WALL & CEILING FINISH REQUIREMENTS BY OCCUPANCY”, sets interior finish requirements for egress systems and rooms and enclosed spaces.

DETAILS

INTERIOR FINISHES – ACCEPTABLE OR NOT?

TABLE 803.9
INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY^a

GROUP	SPRINKLERED ^d			NONSPRINKLERED		
	Exit enclosures and exit passageways ^{a,b}	Corridors	Rooms and enclosed spaces ^c	Exit enclosures and exit passageways ^{a,b}	Corridors	Rooms and enclosed spaces ^c
A-1 & A-2	B	B	C	A	A ^d	B ^e
A-3 ^f , A-4, A-5	B	B	C	A	A ^d	C
B, E, M, R-1	B	C	C	A	B	C
R-4	B	C	C	A	B	B
F	C	C	C	B	C	C
H	B	B	C ^g	A	A	B
I-1	B	C	C	A	B	B
I-2	B	B	B ^{h,i}	A	A	B
I-3	A	A ^j	C	A	A	B
I-4	B	B	B ^{h,i}	A	A	B
R-2	C	C	C	B	B	C
R-3	C	C	C	C	C	C
S	C	C	C	B	B	C
U	No restrictions			No restrictions		

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929m².

- a. Class C interior finish materials shall be permitted for wainscoting or paneling of not more than 1,000 square feet of applied surface area in the grade lobby where applied directly to a noncombustible base or over furring strips applied to a noncombustible base and fireblocked as required by Section 803.11.1.
- b. In exit enclosures of buildings less than three stories above grade plane of other than Group I-3, Class B interior finish for nonsprinklered buildings and Class C interior finish for sprinklered buildings shall be permitted.
- c. Requirements for rooms and enclosed spaces shall be based upon spaces enclosed by partitions. Where a fire-resistance rating is required for structural elements, the enclosing partitions shall extend from the floor to the ceiling. Partitions that do not comply with this shall be considered enclosing spaces and the rooms or spaces on both sides shall be considered one. In determining the applicable requirements for rooms and enclosed spaces, the specific occupancy thereof shall be the governing factor regardless of the group classification of the building or structure.
- d. Lobby areas in Group A-1, A-2 and A-3 occupancies shall not be less than Class B materials.
- e. Class C interior finish materials shall be permitted in places of assembly with an occupant load of 300 persons or less.
- f. For places of religious worship, wood used for ornamental purposes, trusses, paneling or chancel furnishing shall be permitted.
- g. Class B material is required where the building exceeds two stories.
- h. Class C interior finish materials shall be permitted in administrative spaces.
- i. Class C interior finish materials shall be permitted in rooms with a capacity of four persons or less.
- j. Class B materials shall be permitted as wainscoting extending not more than 48 inches above the finished floor in corridors.
- k. Finish materials as provided for in other sections of this code.
- l. Applies when the exit enclosures, exit passageways, corridors or rooms and enclosed spaces are protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

DETAILS

INTERIOR FINISHES – ACCEPTABLE OR NOT? - continued

FOAM PLASTICS

- In general 780 CMR requires that foam plastics be separated from the interior of a building by a 15 minute thermal barrier and that said thermal barrier shall be installed in such a way that it will remain in place for 15 minutes (780 CMR, C26, Section 2603.4).
- For acceptable foam plastics – used in conjunction w/thermal barriers – the flame spread is limited to 75 or less and smoke developed cannot exceed 450 utilizing ASTM E 84 or UL 723 (780 CMR, C26, Section 2603.3).
- Foam plastic that satisfies the “SPECIAL APPROVAL” criteria of 780 CMR, C26, Section 2603.9 does not require a thermal barrier // Note that testing to establish acceptability involves large scale tests and actual end use configuration in the maximum thickness intended for use /Nationally-recognized Testing Standards NFPA 286, FM 4880, UL 1040 or UL 1715 are the presently recognized testing standards // From 780 CMR, C8, Section 803.4 only allows foam plastics satisfying Section 2603.9 for foam plastics used as interior finishes.

DETAILS
INTERIOR FINISHES – ACCEPTABLE OR NOT? - continued

FOAM PLASTICS

- MA amendments, Section 2604.1.1, & Section 2605.1.1 – both Sections titled: “FOAM PLASTICS FOR USE IN A-2 NIGHTCLUBS”, **only allow foam plastics in such A-2 occupancies when the A-2 uses are equipped with an automatic fire suppression system per Chapter 9 of 780 CMR.**

DETAILS

REQUIRED MEANS OF EGRESS ELEMENTS

EXIT ACCESS

- **EXIT ACCESS.** That portion of a means of egress system that
- leads from any occupied portion of a building or structure to an
- *Exit.*

EXIT

- **EXIT.** That portion of a means of egress system which is separated
- from other interior spaces of a building or structure by fire-resistance-rated construction and opening protectives as required to provide a protected path of egress travel between the *exit access and the exit discharge. Exits include exterior exit*
- *doors at the level of exit discharge, vertical exit enclosures, exit passageways, exterior exit stairways, exterior exit ramps and horizontal exits.*

EXIT DISCHARGE

- **EXIT DISCHARGE.** That portion of a *means of egress system*
- between the termination of an *exit and a public way.*

DETAILS

“GRANDFATHERING” v. Existing Building Egress Requirements

- 780 CMR, C1, Section 102.6, “EXISTING STRUCTURES”, in part, reads:
“The legal occupancy of any structure existing on the date of adoption of this code (8th Edition, 780 CMR) shall be permitted to continue w/o change, except as is specifically covered by this code...”

BUT

- 780 CMR, C1, Section 102.6.4, “EXISTING MEANS OF EGRESS, LIGHTING AND VENTILATION”, in part, reads (also see MA-IEBC-09, Section 102.2.2.1):
“The building official shall cite...in writing...and order abatement w/in a timeframe deemed necessary...to make the building environment...comply w/this code,
 1. Less than the required number of means of egress.
 2. Egress components w/insufficient width or so arranged to be unsafe or inadequate, including signage and lighting...”

THUS EXISTING EGRESS IS NOT “GRANDFATHERED”!

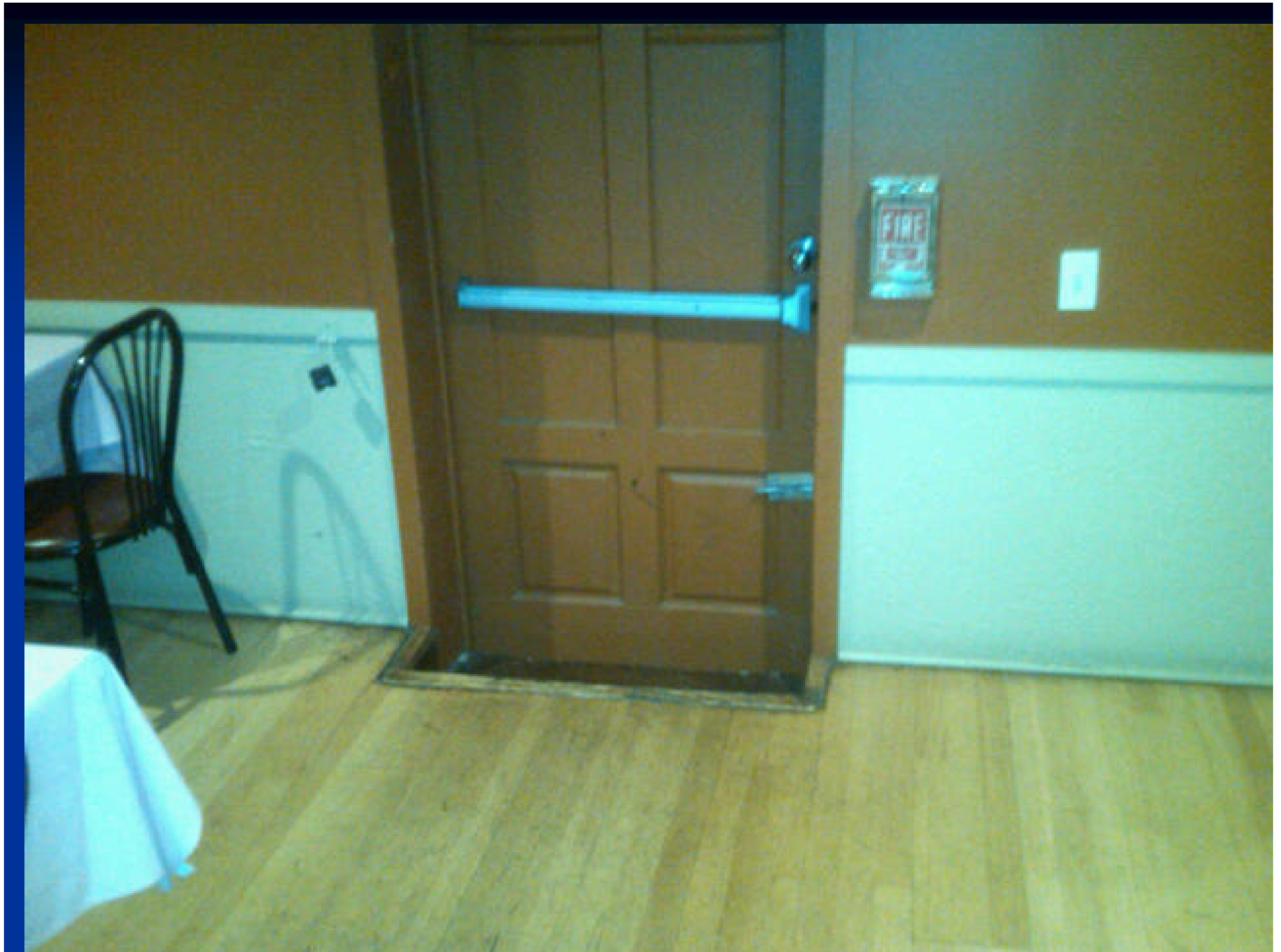
DETAILS

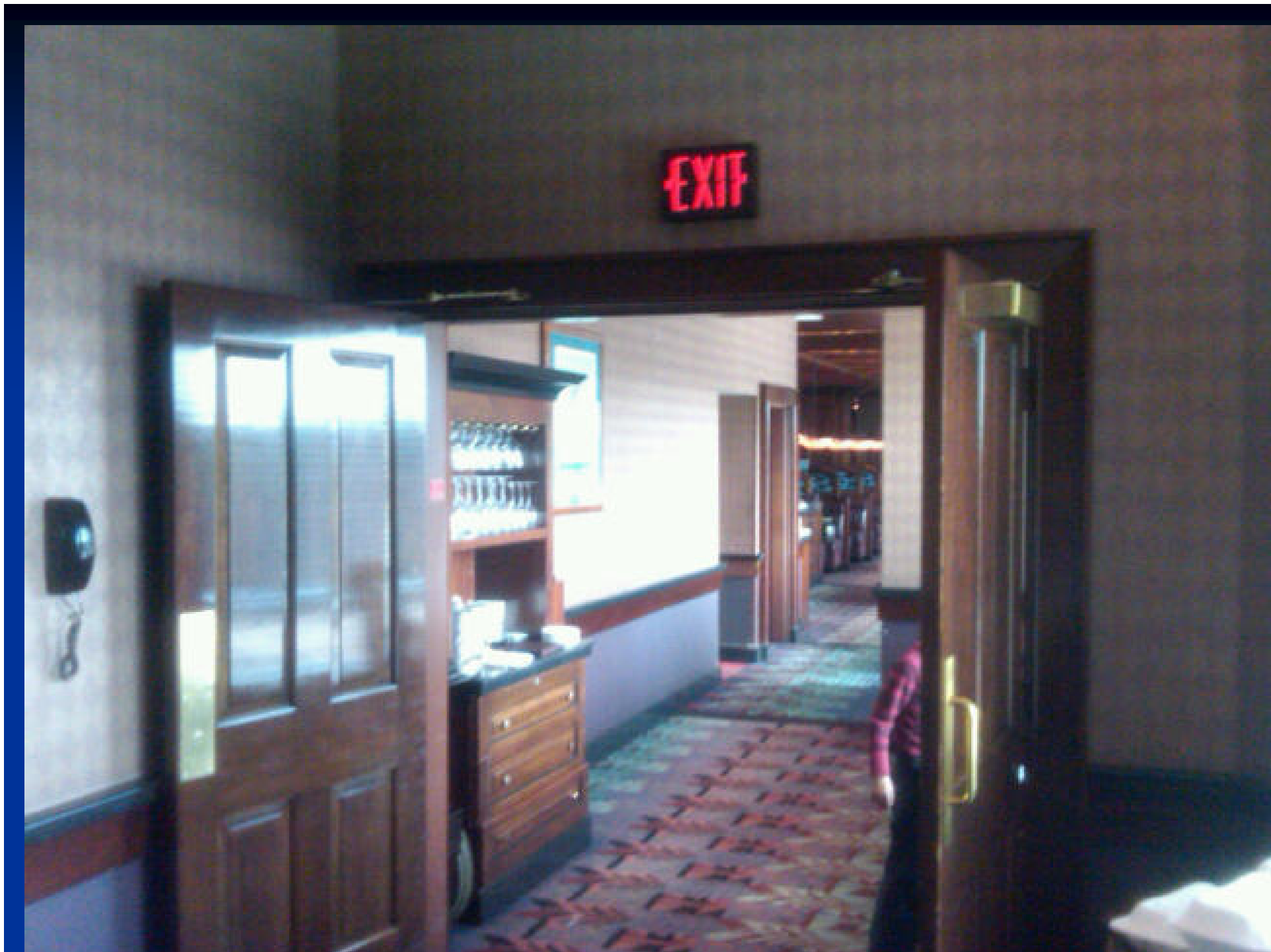
Existing Building Egress Requirements

Although “Existing Egress” is not grandfathered, the Building Official is allowed to use judgment when it comes to determining if an existing egress system is unsafe.

DETAILS
REQUIRED MEANS OF EGRESS INSPECTION – SUGGESTED
PRACTICE

- Walk each and every required means of egress from exit access to exit discharge at a public way.
- Examples (next pages) of what you may find or if you don't walk the egress routes, what you may not see





EXIT

EMERGENCY EXIT
PUSH UNTIL ALARM
SOUNDS. DOOR
CAN BE OPENED IN
15 SECONDS.

SALIDA DE EMERGENCIA
EMPUSE HASTA QUE SUENE
LA ALARMA. LA PUERTA SE
PUEDE ABIRIR AL DADO
DE 15 SEGUNDOS.

PUSH UNTIL ALARM
SOUNDS. DOOR CAN BE
OPENED IN 15 SECONDS.

NOT AN
EXIT

8

DETAILS

(ANY) HANDRAILS AND GUARDS STATUS

1009.12 Handrails (Certain Exceptions apply). Stairways shall have handrails on each side and shall comply with Section 1012. Where glass is used to provide the *handrail*, the handrail shall also comply with Section 2407.

1012.2 (Handrail) Height (Certain Exceptions apply). Handrail height, measured above stair tread nosings, or finish surface of ramp slope, shall be uniform, not less than 34 inches (864 mm) and not more than 38 inches (965mm).

1013.1 (Guards) Where required (Certain Exceptions apply). Guards shall be located along open-sided walking surfaces, including *mezzanines, equipment equipment platforms, stairs, ramps and landings* that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Guards shall be adequate in strength and attachment in accordance with Section 1607.7.

1013.2 Height (Certain Exceptions apply). Required guards shall be not less than 42 inches (1067 mm) high, measured vertically above the adjacent walking surfaces, adjacent fixed seating or the line connecting the leading edges of the treads.

DETAILS

(ANY) STAIR RISE & RUN STATUS

From MA-amended IBC-09 (C1, Section 102.6.4)
& MA-amended IEBC-09 (C1, Section 102.2.2.1):

■Egress components ...so arranged as to be unsafe or inadequate...”

Current Code- requirements on rise & run may not be physically achievable but stair general condition and variation from stair to stair should be assessed if concerns exist.

DETAILS

EXIT SIGNAGE AND MEANS OF EGRESS LIGHTING STATUS

■ **1011.1 (Exit Signs) Where required** (Certain Exceptions apply). Exits and exit access doors shall be marked by an approved exit sign readily visible from any direction of egress travel. The path of egress travel to exits and within exits shall be marked by readily visible exit signs to clearly indicate the direction of egress travel in cases where the exit or the path of egress travel is not immediately visible to the occupants. Intervening means of egress doors within exits shall be marked by exit signs. Exit sign placement shall be such that no point in an exit access corridor or exit passageway is more than 100 feet (30 480 mm) or the listed viewing distance for the sign, whichever is less, from the nearest visible exit sign.

■ **AAB (521 CMR)** requirements too for “TACTILE EXIT SIGNS”.

1011.2 Illumination. Exit signs shall be internally or externally illuminated. /// **Exception: Tactile signs required by Section 1011.3 need** not be provided with illumination.

1011.5.3 Power source. Exit signs shall be illuminated at all times. To ensure continued illumination for a duration of not less than 90 minutes in case of primary power loss, the sign illumination means shall be connected to an emergency power system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Chapter 27.

Exception: *Approved exit sign illumination means that* provide continuous illumination independent of external power sources for a duration of not less than 90 minutes, in case of primary power loss, are not required to be connected to an emergency electrical system.

DETAILS

EXIT SIGNAGE AND MEANS OF EGRESS ILLUMINATION STATUS – contd.

■ **1006.1 Illumination required** (Certain Exceptions apply). The means of egress, including the exit discharge, shall be illuminated at all times the building space served by the means of egress is occupied.

■ **1006.2 Illumination level** (Certain Exceptions apply). The *means of egress illumination* level shall not be less than 1 foot-candle (11 lux) at the walking surface. /// **Exception:** For auditoriums, theaters, concert or opera halls and similar assembly occupancies, the illumination at the walking surface is permitted to be reduced during performances to not less than 0.2 foot-candle (2.15 lux), provided that the required illumination is automatically restored upon activation of a premises' fire alarm system where such system is provided.

1006.3 Illumination emergency power. The power supply for *means of egress illumination* shall normally be provided by the premises' electrical supply. In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas: **1.** *Aisles and unenclosed egress stairways in rooms and spaces that require two or more means of egress.* **2.** *Corridors, exit enclosures and exit passageways in buildings required to have two or more exits.* **3.** Exterior egress components at other than their *levels of exit discharge until exit discharge is accomplished* for buildings required to have two or more exits. **4.** Interior exit discharge elements, as permitted in Section 1027.1, in buildings required to have two or more exits. **5.** Exterior landings as required by Section 1008.1.6 for *exit discharge doorways in buildings required to have two or more exits.* The emergency power system shall provide power for a duration of not less than 90 minutes and shall consist of storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Chapter 27.

DETAILS

A-2 NIGHTCLUBS

ENTERTAINMENT SYSTEM RESPONSE

907.2.1.2 A-2 Nightclub Use – Entertainment System Response. The activation of any *fire protection system element (signaling system, detection, sprinklering, etc.) shall automatically:*

1. Cause immediate illumination of all areas and components of the required means of egress, and additionally;
2. Cause immediate full activation of all other house lighting; and
3. Cause immediate stopping of any and all sounds and visual distractions (public address systems, entertainment and dance lighting, music, *etc.) that conflict/compete with the fire protective signaling system.*

DETAILS

(ANY) DOORS-OPENING METHOD & LOCKING METHODS

780 CMR, C10, Sections **1008.1, “DOORS”**; **1008.1.2, “DOOR SWING”**; **1008.1.3, “DOOR OPENING FORCE”**; **1008.1.4.1, “REVOLVING DOORS”**; **1008.1.4.2, “POWER-OPERATED DOORS”**; and **1008.1.4.3, “HORIZONTAL SLIDING DOORS”** speak to “allowed door operation whether such doors are side-hinged or revolving or sliding.

1008.1.10 Panic and fire exit hardware. Doors serving a Group H occupancy **and doors serving rooms or spaces with an occupant load of 50 or more in a Group A *or E occupancy* shall not be provided with a latch or lock unless it is panic hardware or *fire exit hardware* ///**

Exception: A main *exit of a Group A occupancy* in compliance with Section 1008.1.9.3, Item 2. (involves signage and active management)

DETAILS

(ANY) DOORS-OPENING METHOD & LOCKING METHODS - contd

**780 CMR 1008.1.9.4 Bolt locks.
Manually operated flush bolts or
surface bolts are not permitted.**



DETAILS

NIGHTCLUBS – PRESENCE OF SINGLE MAIN FRONT ENTRANCE – EXIT OR EGRESS ANALYSIS

■ **1028.2, “ASSEMBLY, MAIN EXIT”** (Note that this requirement is mandatory in A-2 nightclubs, new construction): For buildings or portions thereof that are classified as A-2 Nightclubs and which have an occupant load of 50 or greater, the main entrance egress system shall be sized such that the width of all required means of egress elements is 72 inches (nominal) or otherwise such main entrance egress system shall be sized in accordance with the applicable portions of this chapter, whichever criteria results in the larger required means of egress system. the main entrance/exit door system and the main entrance/exit door system shall consist of a pair of side-hinged swinging type doors without a center mullion and shall be equipped with panic hardware.

■ **102.2.2.1 Existing Non Conforming Means of Egress.** The following conditions shall be corrected in all existing buildings (presented here only in part):

4. Where the occupant load of an existing Group A-2 Nightclub use is 50 or greater, the main entrance/exit door shall be a minimum 72 inches (nominal) width...and shall be equipped with panic hardware CMR 10.00). **As an alternative**... the owner shall cause the existing means of egress system to be evaluated by a *registered design professional*. *Such evaluation shall determine* whether the existing means of egress is sufficient to accommodate the occupant load or whether the existing means of egress requires improvement to accommodate safely the occupant load. If the existing means of egress is insufficient to accommodate the occupant load, such inadequate means of egress will, as a minimum, be deemed in violation of this code. Calculation methodologies based on alternative approaches to life safety may be utilized in order to effect said egress evaluation.

DETAILS

EGRESS THROUGH INTERVENING SPACES - STATUS

1014.2 Egress through intervening spaces. (presented only in part) Egress through intervening spaces shall comply with this section.

1. Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where such adjoining rooms or areas and the area served are accessory to one or the other (the spaces are interrelated / emphasis added), are not a Group H occupancy and provide a discernible path of egress travel to an *exit*.

Exception(s):

2. An *exit access* shall not pass through a room that can be locked to prevent egress.
4. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes.

DETAIL

5 YEAR TEST & CERTIFICATION OF EXTERIOR STAIRS, FIRE ESCAPES, ETC.

1001.3.2 Testing and Certification. All exterior bridges, steel or wooden stairways, fire escapes and egress balconies shall be examined and/or tested, and certified for structural adequacy and safety every five years, by a *registered design professional, or others qualified and acceptable to the building official; said professional or others shall then submit an affidavit to the building official.*

DETAILS

AAB ACCESS - STATUS

- Is the property in compliance w/applicable provisions of 521 CMR?
 - Work performed? (i.e., restriping a parking lot; replacing a broken toilet, etc.)
 - \$100,000 threshold?
 - 30% of the assessed value of the building
 - No 521 CMR applicability but possibly ADA issues or not

ACCESSIBLE ROUTE ?

DETAILS

ANY INDICATION OF UNSAFE LIGHTING OR UNSAFE VENTILATION?

102.2.2.5 Unsafe Lighting and/or Ventilation. In any existing building, or portion thereof, in which (a) the lighting or ventilation do not meet the applicable provisions in Chapter 12 of the *International Building Code 2009 with Massachusetts Amendments* (780 CMR 12.00), and (b) which, in the opinion of the *building official*, are dangerous, or hazardous, to the health and safety of the occupants, the *building official shall order the abatement of such conditions to render the building or structure occupiable or habitable as applicable for the posted use and occupant load.* In enforcing the provisions of this section the *building official may require or accept engineering or other evaluations of the lighting and/or ventilation systems in order to evaluate possible dangerous or hazardous conditions and acceptable solutions.*

Where full compliance with 780 CMR for new construction is not practical for structural and/or other technical reasons, the *building official may accept compliance alternatives, or engineering or other evaluations which adequately address the building or structure livability for the posted use and occupant load.*

DETAILS
SMOKE AND/OR FIRE DAMPER PRESENCE IN
EGRESS CORRIDORS – STATUS

Are there duct penetrations in the corridors and/or exit stair towers?

If YES, do such ducts require fire and/or smoke or combination dampers?

DETAILS

DOCUMENTATION OF TESTING FOR ALL FIRE PROTECTION SYSTEMS INCLUDING TESTING BY APPROPRIATE PERSONNEL

Sprinkler system maintenance documents.

Documentation showing stand pipe maintenance compliance.

Documentation showing fire alarm/detection systems testing & maintenance .

Generator documentation - Emergency or Standby or 90 minute battery documentation .

Kitchen hood extinguishing system documentation – also look for proper location of “K” extinguisher and manual hood trip.

FIRE SPRINKLER SYSTEM INSPECTION, TESTING & MAINTENANCE

- Inspection Testing & Maintenance
per NFPA 25, Chapter 5

STANDPIPE & HOSE SYSTEM INSPECTION, TESTING & MAINTENANCE

- Inspection Testing & Maintenance
per NFPA 25, Chapter 6

FIRE ALARM/DETECTION SYSTEMS INSPECTION, TESTING & MAINTENANCE

- **Inspection Testing & Maintenance
per NFPA 72**

GENERATOR DOCUMENTATION - EMERGENCY OR STANDBY OR 90 MINUTE BATTERY DOCUMENTATION

■ Documentation per NFPA 110

KITCHEN HOOD EXTINGUISHING SYSTEM DOCUMENTATION

■ Documentation per NFPA 96

**DETAILS
OTHER INSPECTIONS**

OTHER INSPECTIONS?

OTHER THOUGHTS?